

## Attachment J02

# Fort Jackson Natural Gas System

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# **. J02 U.S. Army Fort Jackson Natural Gas Distribution System**

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## **J02.1 Fort Jackson Overview**

The main mission of Fort Jackson is to support a military tradition of excellence established on June 2, 1917, a new Army training Center was established to answer America's call for trained fighting men in the early, ominous days of World War I. This installation would become the largest and most active of its kind in the world. First known as the Sixth National Cantonment, and later as Camp Jackson, Fort Jackson has always served as the Army's pioneer in the training environment. Named the Army's Community of Excellence in 1988, Fort Jackson has continued to earn awards for excellence year after year. The initial site of the cantonment area consisted of almost 1,200 acres. The citizens of Columbia donated the land to the federal government, thereby initiating the long tradition of respect, cooperation and friendship between the city and the installation. In fact, Fort Jackson was incorporated into the city in October 1968.

Named in honor of Major General Andrew Jackson, a native son of the Palmetto State and the seventh president of the United States, Camp Jackson was designated as one of 16 national cantonments constructed to support the war effort. Years of Growth The pressure of World War I brought swift changes. Within 11 days of the signing of a contract to construct the camp, the 110-man camp guard arrived. By the end of the first month, the labor force had grown to more than 1,200 and the first two barracks were completed. Two months later, the force had grown to almost 10,000 men. Virtually overnight, Camp Jackson had grown from a sandy-soil, pine and scrub oak forest to a thriving Army training center, complete with a trolley line and hundreds of buildings. Three months after construction began; some 8,000 draftees arrived for training. The first military unit to be organized here was the 81st "Wildcat" Division, under the camp's first official commander, Major General Charles H. Barth. Members of the original guard, who had been the first to occupy the camp, were moved to Camp Sevier in Greenville, S.C., and incorporated into the 30th "Old Hickory" Division, named in honor of Jackson. More than 45,000 troops from these famed divisions went to France as part of the America Expeditionary Forces. The World War Years In less than eight months, construction of the vast camp was complete. But almost as suddenly as it began, the clamor subsided. With the signing of the Armistice in 1918, the famed 30th Division was inactivated. The 5th Infantry Division trained here until it was inactivated in 1921. Control of the camp reverted to the Cantonment Lands Commission, and from 1925 to 1939, the sleepy silence was broken only by the occasional reports of weapons fired by state National Guardsmen. In 1939, the demands of war brought the area again under federal control, and Fort Jackson was organized as infantry training center. Four firing ranges were constructed, and more than 100 miles of roads were hard surfaced and named for legendary Revolutionary War figures and heroes of the Civil War. During World War II, the "Old Hickory" Division was one of the first units to reappear on the scene, just as it had in 1917. More than 500,000 men received some phase of their training here. Other famed units to train at Fort Jackson during this period were the 4th, 6th, 8th, 26th, 77th, 87th, 100th and 106th. The 31st "Dixie" Division trained here during the Korean Conflict. 75 Years of Excellence Fort Jackson had grown over the years, but most of the buildings were temporary. Finally in 1964, construction began on permanent steel and concrete buildings to replace wooden barracks that had housed the Fort's troops since the early 1940's. In recognition of the Fort's 50th anniversary in 1967, the citizens of Columbia gave Fort Jackson the statue of Andrew Jackson that stands at Gate #1. With the establishment of the modern

volunteer Army in 1970 and the need to promote the attractiveness of service life, construction peaked in an effort to modernize facilities and improve services. In June 1973, Fort Jackson was designated as an U.S. Army Training Center, where young men and women are taught to think, look and act as soldiers - always. Through the year, changes have been made to enhance training. Victory Tower, an apparatus designed to complement basic combat training, is used to reinforce the skills and confidence of the individual soldier. Field training exercises (FTX) were incorporated into advanced individual training (AIT) so soldiers would have an opportunity to practice MOS and common skills in a field environment. By 1988, initial entry training (IET) strategy was implemented. The standard unit of training was the platoon. Training focused on hands-on skill development rather than platoon instruction. Fort Jackson continues to win awards as we move toward our vision of the future. The goal is to make Fort Jackson the living, working and training environment it can be. "Victory Starts Here", as it has since 1917.

Major Activities/Tenants include:

- ?? Basic Combat Training (BCT)
- ?? Basic Training Tour
- ?? 1st Basic Combat Training Brigade
- ?? 1st Battalion, 28th Infantry Regiment
- ?? 2nd Battalion, 28th Infantry Regiment
- ?? 2nd Battalion, 13th Infantry Regiment
- ?? 3rd Battalion, 13th Infantry Regiment
- ?? 2nd Battalion, 60th Infantry Regiment
- ?? 4th Training Brigade
- ?? 1st Battalion, 61st Infantry Regiment
- ?? 2nd Battalion, 39th Infantry Regiment
- ?? 1st Battalion, 34th Infantry Regiment
- ?? Victory Brigade and Support of Basic Training
- ?? Advanced Individual Training (AIT)
- ?? Chaplain Center & School
- ?? Drill Sergeant School
- ?? Pre-Command Course
- ?? Soldier Support Institute
- ?? Adjutant General School
- ?? Finance School
- ?? NCO Academy
- ?? Recruiting and Retention School
- ?? Hospital
- ?? Other Military and Civilian Organizations

## **J02.2 Natural Gas System Description**

### **J02.2.1 Natural Gas Distribution System Fixed Equipment Inventory**

The U.S. Army Fort Jackson gas distribution system consists of all appurtenances physically connected to the distribution system from the point in which the distribution system enters the Base,

and/or Government ownership currently starts, to the point of demarcation defined by the real estate instruments. Generally, the point of demarcation will be the building footprint. The system may include, but is not limited to, pipelines, valves, regulators, and meters. The following description and inventory is included to provide the Offeror with a general understanding of the size and configuration of the distribution system. The Offeror shall base the proposal on site inspections, information in the bidder's library, other pertinent information, and to a lesser degree the following description. Under no circumstances shall the Contractor be entitled to any rate adjustments based on the accuracy of the following description and inventory.

#### **J02.2.1.1 Description**

Fort Jackson natural gas is supplied by the local utility, South Carolina Electric and Gas Company (SCE&G). Gas supply for the main cantonment area enters the reservation boundary through a utility-owned and, maintained, dual-metered, master service near the southwest area of the Installation and west of the Main (Jackson Ave.) Gate. Delivery pressures can be as high as 150 psi depending on flows on the supply system. There is a regulator on the government side of the utility's metering station and the pressure is set to reduce pressure to about 70 psi. When the installation Liquefied Petroleum (LP)/air blending system is on line, it produces a pressure in excess of the regulator pressure setting and supply from the utility ceases.

The local utility, by contract provides interruptible service to the installation in three categories. Category 7 natural gas has the highest priority for interruption (most frequently interrupted during the heating season) is the largest energy plant metered by government owned meter is backed up by oil. The two smaller energy plants are Category 6 and have second highest priority for interruption. They are also metered by government owned meters and backed up by oil. The remainder of the installation gas Category 3 has the lowest priority for interruption (least frequently interrupted) and is backed up by an LP/air blending system that injects LP and air into the distribution system. The installation can use either or both of the alternate fuels (LP or oil) instead of natural gas if they are cheaper than natural gas.

Government ownership of gas utilities begins at the SCE&G master meter. The pressure is reduced from the approximately 70 psi at pressure regulator stations located throughout the distribution system to low-pressure ranging at pressure 16 regulators stations throughout the distribution system to low-pressure ranging from 25 to 40 psi. The laundry is equipped with a standby propane system and is required by the government to interrupt use of natural gas during Category 3 gas service interruptions and the government charges the government owned/contractor operated laundry a rate derived from the Category 3 natural gas utility rate.

#### **J02.2.1.2 Inventory**

Table 1 provides a general listing of the major natural gas system fixed assets for the U.S. Army Fort Jackson distribution system included in the purchase. The system will be sold in an "as is, where is" condition without any warrant, representation, or obligation on the part of the Government to make any alterations, repairs, or improvements. All ancillary equipment attached to and necessary for operating the system, though not specifically mentioned here in, is considered part of the purchased utility.

**TABLE 1**  
Fixed Inventory  
Gas Distribution System Inventory, U.S. Army Fort Jackson

Item	Size	Quantity	Unit	Approximate Year of Construction
Pipe	<2"	129,565	Linear Feet	1971
	2" - 21/2"	46,815	Linear Feet	1971
	3"	16,435	Linear Feet	1971
	4"	24,900	Linear Feet	1969
	5"	1,774	Linear Feet	1984
	6"	13,852	Linear Feet	1969
	8"	6,474	Linear Feet	1973
	10"	19,764	Linear Feet	1981
<b>Building Services</b>		579	Ea	1969
<b>Pressure Reduction Station</b>		9	Ea	1974
<b>Main Valves</b>		231	Ea	1969
In Line Meters		38	Ea	1978

Notes:

LF = Linear Feet

EA = Each

## J02.2.2 Natural Gas Distribution System Non-Fixed Equipment and Specialized Tools Inventory

**Table 2** lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment and tools. The successful Contractor shall provide any and all equipment, vehicles, and tools, whether included in the purchase or not, to maintain a fully operating system under the terms of this contract.

**TABLE 2**  
Spare Parts  
Natural Gas Distribution System U.S. Army Fort Jackson

Qty	Item	Make/Model	Description	Remarks
	None Identified			

**TABLE 3**

Specialized Equipment and Vehicles  
Natural Gas Distribution System U.S. Army Fort Jackson

Description	Quantity	Location	Maker
None Identified			

### J02.2.3 Natural Gas System Manuals, Drawings, and Records Inventory

**Table 4** lists the manuals, drawings, and records that will be transferred with the system.

**TABLE 4**

Manuals, Drawings, and Records  
Natural Gas Distribution System U.S. Army Fort Jackson

Qty	Item	Description	Remarks
None			

## J02.3 Current Service Arrangement

Fort Jackson natural gas is supplied by the local utility, South Carolina Electric and Gas Company (SCE&G). Gas supply for the main cantonment area enters the reservation boundary through a utility-owned and, maintained, dual-metered, master service near the southwest area of the Installation and west of the Main (Jackson Ave.) Gate.

## J02.4 Secondary Metering

The Base may require secondary meters for internal billings of their reimbursable customers, utility usage management, and energy conservation monitoring. The Contractor shall assume full ownership and responsibility for existing and future secondary meters IAW Clause C.3.

### J02.4.1 Existing Secondary Meters

Table 5 provides a listing of the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings once a month for all secondary meters IAW H.5 and J32.5 below.

**TABLE 5**  
Existing Secondary Meters  
Gas Distribution System U.S. Army Fort Jackson

BLDG NO.	USER/FUNCTION	READING	METER LOCATION	METER S/N	REASON FOR METER
1155	RES ENGR	4926	SIDE OF BLDG AT ENTRANCE	1035439	REIMBURSEMENT
1558	LAUNDRY		FRONT BLDG MIDDLE		REIMBURSEMENT
1644	RNSUCFSU3	6099	REAR OF BLDG	279220	REIMBURSEMENT
1701	120TH	7122	INSIDE FENCE AT GATE AND REAR BLDG	1007782	REIMBURSEMENT
1701	120TH	7742	INSIDE FENCE AT GATE AND REAR BLDG	A517824	REIMBURSEMENT
2100	4TH BDE MAINT SCHOOL	47308	REAR BLDG NEAR MIDDLE		DHEC REPORT
2159	PX ANNEX	5495	SIDE OF BLDG	52780597	REIMBURSEMENT
2369	POST EXCHANGE (PX)	50542	BLDG MECHANICAL ROOM	83118379	REIMBURSEMENT
2369	PX OFFICE	841	BLDG MECHANICAL ROOM		REIMBURSEMENT
2522	LION CLUB	3863	LEFT SIDE NEAR ENTRANCE		REIMBURSEMENT
2540	4TH BDE TRNG	17009	NEAR REAR LOADING DOCK		DHEC REPORT
3630	O CLUB 7809072	29819	REAR NEAR LOADING DOCK	7809072	REIMBURSEMENT
4120	PX ANNEX	5281	REAR OF BLDG	54496951	REIMBURSEMENT
4500	MONCRIEF ARMY HOSPITAL				REIMBURSEMENT
4575	TROUP MEDICAL CLINIC				REIMBURSEMENT
4590	DENTAL CLINIC				REIMBURSEMENT
4710	CREDIT UNION	8958	REAR AT DRIVE IN LANE	59797	REIMBURSEMENT
4712	PX (TO BE REPLACED)	15116	IN BREEZE WAY NEAR UTILITY ROOM	51693	REIMBURSEMENT
4716	COMMISSARY	17302	LEFT SIDE BUILDING AT CORNER	51854	REIMBURSEMENT
5615	SCHOOL	706236	REAR BLDG AT FURNACE ROOM	N209044	REIMBURSEMENT
5650	PX	6540	REAR BLDG AT LOADING DOCK	1018766	REIMBURSEMENT
5670	PX ANNEX BURGER KING	16900400	REAR OF BLDG	866362466	REIMBURSEMENT
5700	NCO CLUB	16447	REAR BLDG NEAR TRANSFORMER	56054833	REIMBURSEMENT
5715	SCHOOL	69766	SIDE BLDG AT LOADING DOCK		REIMBURSEMENT
5900	SCHOOL	423789	RIGHT SIDE OF LOADING DOCK	12153	REIMBURSEMENT
5900	SCHOOL	17	FRONT MIDDLE OF BLDG	175	REIMBURSEMENT
5975	YOUTH CENTER	450762	REAR OF BLDG IN FENCED AREA		REIMBURSEMENT
6000	PALMETTO LODGE	19475	RIGHT SIDE ENTRANCE	8456322 60	REIMBURSEMENT
6510	COMMUNITY ACTIVITY CENTER	11760000	REAR BLDG AT COOLING TOWER		REIMBURSEMENT
9810	USAR 120TH	384135	REAR OF BLDG AT TRANSFORMER	5800	REIMBURSEMENT
10440	PX ANNEX	70348	INSIDE FENCED AREA AT LOADING DOCK	26067	REIMBURSEMENT
12500	PX PHOTO IN VIDEORAMA	1227700	FRONT BLDG ON RIGHT		REIMBURSEMENT
13000	US ARMY RESERVE	7320200	FRONT RIGHT SIDE MAINT ROOM	91S5618480	REIMBURSEMENT
13100	US ARMY RESERVE	6004	FRONT - RIGHT SIDE BLDG	U 851258	REIMBURSEMENT
13200	US ARMY RESERVE	21804	INSIDE FENCE NEAR BLDG RIGHT SIDE		REIMBURSEMENT
AREA	EM HOUSING	54227	FENCED AREA IMBODEN AND FIASON CT	33352	REIMBURSEMENT
AREA	OFFICERS QTRS GAS	131940	FENCED AREA		REIMBURSEMENT

## **J02.4.2 Required New Secondary Meters**

The Contractor shall install and calibrate new secondary meters as listed in Table 6. New secondary meters shall be installed IAW Clause C.17, Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Clauses C.3, H.5, and J31.5 below.

**TABLE 6**

New Secondary Meters  
Gas Distribution System U.S. Army Fort Jackson

Meter Location	Meter Description
None Identified	

## **J02.5 Submittals**

In addition to the submittal requirements from Clause H.5, the Contractor shall provide the Government monthly submittals for:

1. Invoicing (IAW G.2) for the previous months' services. The Contractor's invoice shall be prepared in a format proposed by the Contractor and accepted by the Contracting Officer.
2. Monthly Outage Report for the previous month. The Contractor's monthly outage report shall be prepared in the format presented in Attachment 1.
3. Meter Reading Report in support of internal billings, energy usage management, and monitoring. The Contractor's monthly meter reading report shall be prepared in the format presented in Attachment 2.
4. System Efficiency Report. If, at any time during the contract, as required by Clause C.3 the Contractor shall submit a system efficiency report in a format proposed by the Contractor and accepted by the Contracting Officer.

## **J02.6 Energy Savings Projects**

IAW C.3, Utility Service Requirement, the following projects have been implemented by the Government for managing and monitoring:

?? None

## **J02.7 Service Area**

The service area(s) include all facilities that use natural gas located at U.S Army Fort Jackson boundaries.

## **J02.8 Off-Installation Sites**

None.



## J02.9 Specific Transition Requirements

IAW Clause C.17, Transition Plan, **Table 7** lists service connections and disconnection's required upon transfer, and **Table 8** lists the improvement projects required upon transfer of the U.S Army Fort Jackson natural gas distribution system.

**TABLE 7**

Service Connections and Disconnections  
Natural Gas Distribution System U.S Army Fort Jackson

Location	Description
None Identified	

**TABLE 8**

System Improvement Projects Natural Gas Distribution System U.S. Army Fort Jackson

Project Location	Project Description
None Identified	

## J02.10 Natural Gas Distribution System Points of Demarcation

The point of demarcation is defined as the point on the distribution system where ownership changes from the Grantee to the building owner. The table below identifies the type of service and general location of the point of demarcation with respect to the building for each scenario. During the operation and maintenance transition period, concurrence on specific demarcation points will be documented during the joint inventory of facilities.

Point of Demarcation	Applicable Scenario	Sketch
The point of demarcation is the down stream side of the natural gas meter.	Natural gas service to the building is metered.	<p>Distribution Line</p> <p>Service Line</p> <p>Structure</p> <p>Meter</p> <p>Point of Demarcation</p> <p>Distribution Line</p>
The point of demarcation is the down stream side of the pressure regulator.	Natural gas service to the building is regulated but not metered.	<p>Distribution Line</p> <p>Pressure Regulator</p> <p>Service Line</p> <p>Structure</p> <p>Point of Demarcation</p> <p>Distribution Line</p>
Point of demarcation is the down stream side of the closest apparatus to the exterior of the facility	More than one apparatus is connected to the service line feeding the facility.	<p>Distribution Line</p> <p>Pressure Regulator</p> <p>Service Line</p> <p>Structure</p> <p>Meter</p> <p>Point of Demarcation</p> <p>Distribution Line</p>
Point of demarcation is where the piping penetrates the building envelope.	No meter or regulator exists at the facility.	<p>Distribution Line</p> <p>Service Line</p> <p>Shutoff Valve</p> <p>Structure</p> <p>Point of Demarcation</p> <p>Distribution Line</p>

## J02.11 Unique Points of Demarcation

The following table lists anomalous points of demarcation that do not fit any of the above scenarios.

Building No.	Point of Demarcation Description
None	